BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Estimate Cost Rs. 1200000.00

Name of Work: Estimate for Drilling of Borewells and Providing Pump and Motors in Bhadrappa layout, Devinagara and Maruthinagara in ward No. 8 , Kodigehalli sub division

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction **(P.48, I. 9.4) PRED.SR 2012-13**								
		Each	2				**2**	1882.00	3764.00
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **P. 46 / I. 9.1 PRED SR 2012-13**								
	0 to 50 m	Rmtr	2	50.00			**100.00**	306.00	**30600.00**
	50 to 100 m	Rmtr	2	50.00			**100.00**	400.00	**40000.00**
	100 to 150 m	Rmtr	2	50.00			**100.00**	445.00	**44500.00**
	150 to 200 m	Rmtr	2	50.00			**100.00**	470.00	**47000.00**
	200 to 250 m	Rmtr	2	50.00			**100.00**	544.00	**54400.00**
	250 to 300 m	Rmtr	2	50.00			**100.00**	583.00	**58300.00**
3	Supply of ISI mark 175 mm nominal bore, Plain end steel casing pipe - grade of Steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by baseic open hearth electric or basic oxygen process in random length of 5 to 7 mts both ends threaded confirming tio IS 554/1985, one end fixied with socket confirming to IS 4270:2001 and the other end with screwed pipes ISI Marking weighing 25.10Kg/mtr (Inclusive of all taxes and durties) Prices include Collar-medium duty **P. iii, I No. 84 PRED SR 2012-13**								
		Rmtr	2	70.00			**140.00**	1325.00	**185500.00**
4	Providing 250mm dia PVC Pipe 6kg/cm **SE PRED Approved Rate**								
		Rmtr	2	18.00			**36.00**	754.47	**27161.00**
5	Providing and fixing 160mm Borewell Cap **P. iii, I No. 85**								
		Each	2				**2**	100.00	**200.00**
6	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 12.50 HP 20 stage. **SE RDED Approved Rate PWD SR 2013-14 P. XXXXII Item No. 23 CRI Pumps including of all taxes 12.5 HP 20 Stage**								
		No	2				**2**	56200.00	**112400.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
7	Supplying of ISI marked galvanized mild steel tube (continously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1986 with latest amendments, pipes threaftes at one end and the other end protected asper specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendament 1-5 and with all its latest amendements if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15.10.2008								
		Rmtr	2	250.00			**500.00**	375.00	187500.00
8	Heavy Duty Collar 50 mm dia								
		Nos	2	41.00			**82.00**	130.00	10660.00
9	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 Volts. P. No. 49/ I No. 29-b(1) **4 Sqm mm of 56 strands 0.3mm dia Group - A KPWD Electrical SR 2010-11**								
		Mtr	4	260.00			**1040.00**	151.00	157040.00
10	Erection of pumpset including aligning and balancing with all necessary erection materials and labour including supply and erection of one pair supporting clamps, one borewell cap. Cable clips with bolts, nuts, valves guages etc., involoved in the job (Necessary GI pipe and specials with be supplied by the board at the site free of cost) **(As per rate approved KUWS & DB for year 2008-09**								
		No	2				**2**	3000.00	6000.00
11	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., **P No. 32/ I No. 2/f KPWD Electrical SR 2010-11**								
		Each	2				**2**	285.00	570.00
12	Supplying of LTUG cable having aluminium condutor PVC insulated shethed, galvnised steel, wire / steel tap armoured cable with PVC outer sheathing 1.1 KV class.**P No. 68/ I No. 4(d) 4 core 16 Sqmm KPWD Electrical SR 2010-11**								
		Mtr	2	30.00			**60.00**	150.00	9000.00
13	Labour charges for laying of 1.1 K.V class UG cable (PWD Electrical SR-1999-2000, **P No. 69 / I No. Ia In existing trencg/duct 6Sqmm to 16 Sqmm) KPWD Electrical SR 2010-11**								
		Mtr	2	30.00			**60.00**	8.00	480.00
14	Digging or trenching of 0.6m deep x 0.5 mtr wide refilling the trench to the required ground level and consolidating etc., complete (as per Civil SR KSRB **1-2 P-7) P No. 70/ I. No. 6-c KPWD Electrical SR 2010-11**								
	For Cutting Road Surface	Mtr	2	25.00			**50.00**	60.00	3000.00
15	Supplying and fixing of Class A (meaium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class **P. No. 70/ I No.9-A KPWD Electrical SR 2010-11**								
	40mm dia GI pipe	Mtr	2	4.00			**8.00**	240.00	1920.00
16	Supplying and fixing L.T. cast Iron pot head suitable for 1.1 KV class UG cable filled with necessary bituumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., **P. No. 70/ I No. 10-b KPWD Electrical SR 2010-11**								
	16Sqmm	No.	2				**2.00**	260.00	520.00
17	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C cutouts and other equipments on the meter board using 40 mm dia 2.90 mm thick GI pipe 2.5 m long buried in a pit. The pit should be filled with equal propotion of solt and charocoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size, as per ISI specification 7.3.3 IS 732 using 12 mm dia bolts, nuts, washers and check nuts, etc., the pipe shall have 16 throught holes of 122 mm dia, (PWD Electrical SR-1999-2000, **(P No.68, I No. 1) KPWD Electrical SR 2010-11**								
		No	2				**2**	1950.00	3900.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
18	Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., complete.... **P No. 32/I No 3b KPWD Electrical SR 2010-11**								
	32 Amps	No.	12				**12**	100.00	1200.00
19	KSRB 13-7.1-4: Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 **Page No. 90 Item No. 13.55 / PWD SR 2014-15**								
		Nos	2				**2**	1579.40	3159.00
	Basic Rate	1490.00							
	Area Weightage @ 6%	89.40							
	Total	**1579.40**							
20	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete. **P. No. 92 / I. No. 13.81.3 PWD SR 2014-15**								
	50mm dia	No	2				**2**	227.90	456.00
	Basic Rate	215.00							
	Area Weightage @ 6%	12.90							
	Total	**227.90**							
21	Supplying and fixing 50mm dia GI X nipple with ISI mark with all lead and lift loading unloading and labour charges etc complete								
		No	2	4.00			**8**	80.00	640.00
22	Supplying shunt capaitors conforming to IS 2834, 3phase 400/440 volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos. 2KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications								
		No	2				**2**	350.00	700.00
23	Supplying and fixing miniature circuit breakers/solaters on existing MCB distribution boards using necessary fixing materiasl wiring complete as requireds 5 to 30 amps triple pole with all lead and lift, loading, unloading and labour charges etc complete as per specifications								
		No	2				**2**	1000.00	2000.00
24	Fabrication supplying and mounting MS box of 16 SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm @ Rs.0.33 **P.No. 41, I. No. 38B KPWD Electrical SR 2010-11**								
	16SWG	Sq.Cm	4	120.00	60.00		28800.00		
		Sq.Cm	2	360.00	25.00		18000.00		
							46800.00	0.33	15444.00
25	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. **12.5HP to 15 HP Star Delta Starter SERDED Rate**								
		No.	2				**2**	11000.00	22000.00
26	Earthwork excavation for pipeline trenches including deporiting or bank up to a lead of 50 mtrs including shiriry and statting danger lighting and using site rails and boming poles at every 100 mtrs wherever necessary as directed in th following strructure manhole. **Page No. 01/ Item No.1.2.2 / PRED SR 2012-13 Hard Soil**								
		Cum	2	210.00	0.60	0.75	189.00		
							189.00	188.00	35532.00
	Basic Rate	188.00							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
27	Providing and instalation at site of works P.V.C.Pipes including cost of pipes and specials and incluidng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., **Page No.15 item No.3.4.2 b PRED SR 2012-13.**								
	75 mm dia 6 KSC PVC pipe	Rmtr	2	210.00			420.00		
							420.00	157.00	65940.00
28	Refilling the basement and pipeline treanches with secleted available earthe for trench excavation including authority condition in layers from thedi including disponsary of the sunplus earth with a heavy 200 mtrs **Page No. 3 / Item No. 1.6 / PRED SR 2012-13**								
		Cum	Qty. Vide Item No. 25				**189.00**	61.00	11529.00
	Basic Rate	61.00							
29	KSRB 13.6.3-6 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) **50mm** nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 **P. 89 / I.13.37 PWD SR - 2014-15**								
		Each	10				**10**	2120.00	21200.00
	Basic Rate	2000.00							
	Area Weightage @ 6%	120.00							
	Total	2120.00							
	Sub-Total								1164215.00
30	BESCOM Deposit for Engersation	L/S	2	12000.00					24000.00
31	Water supply testing charges	1% of sub total cost							11642.00
32	Miscellaneous and Unforeseen Charges	L/S							143.00
								Total	1200000.00
	(Rupees Thirty Lakhs Only)								

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.

2 This estimate is prepared as per C.S.R. of PWD 2014-15, PWD Elecrical 2010-11, PRED 2012-13 & SE-RDED approved Rate.

4 The provisions were made in this estimate are necessary and adequate.

5 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 8

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP

Administrative Approval
Accorded For 12.00 lakh Rs.
Head of A/C P1802
CER NO :223 Dt 23.03.15

TA

CE (YNK)

Technical Sanction for Rs. 12.00 L
Twelve lakhs only
Registered as EE No: 66 Dated 23/03/15 subject to conditions contained endorsed memo.
No: 403 Dt 28/03/15
Asst 28/03
SE (BTP Div.)